

Ethnic (Niche Crops) with Market Potential

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Niche Crops

A series of crops that are grown with the intention to satisfy the needs of selected group of customers (Niche market-Ethnic consumers).

The Challenge

- Niche crops by their nature are designed for small markets, and therefore, smaller consumer groups. Therefore, they are only profitable when fewer farmers grow them. However, when many farmers decide to grow niche crops, they no longer remain profitable as the supply easily surpasses the demand

Suggestion

It is suggested that growers interested in growing niche crops continuously research new consumer trends for the next niche crop with market potential. On the average the life span of a niche crop to remain profitable is 3-5 years.

Farmer growing niche crops must participate in educating potential consumers about the benefits of niche crops that he/she chooses to grow.

A Few Niche Crops Example



Pithaya-Dragon Fruit
Hylocereus undatus



Saffron, *Crocus sativus*



Saffron, *Crocus sativus*



The vivid crimson [stigmas](#) and [styles](#), called threads, are collected and dried to be used mainly as a [seasoning](#) and coloring agent in food

The stigma, petals and stamen are easy to separate with your hands



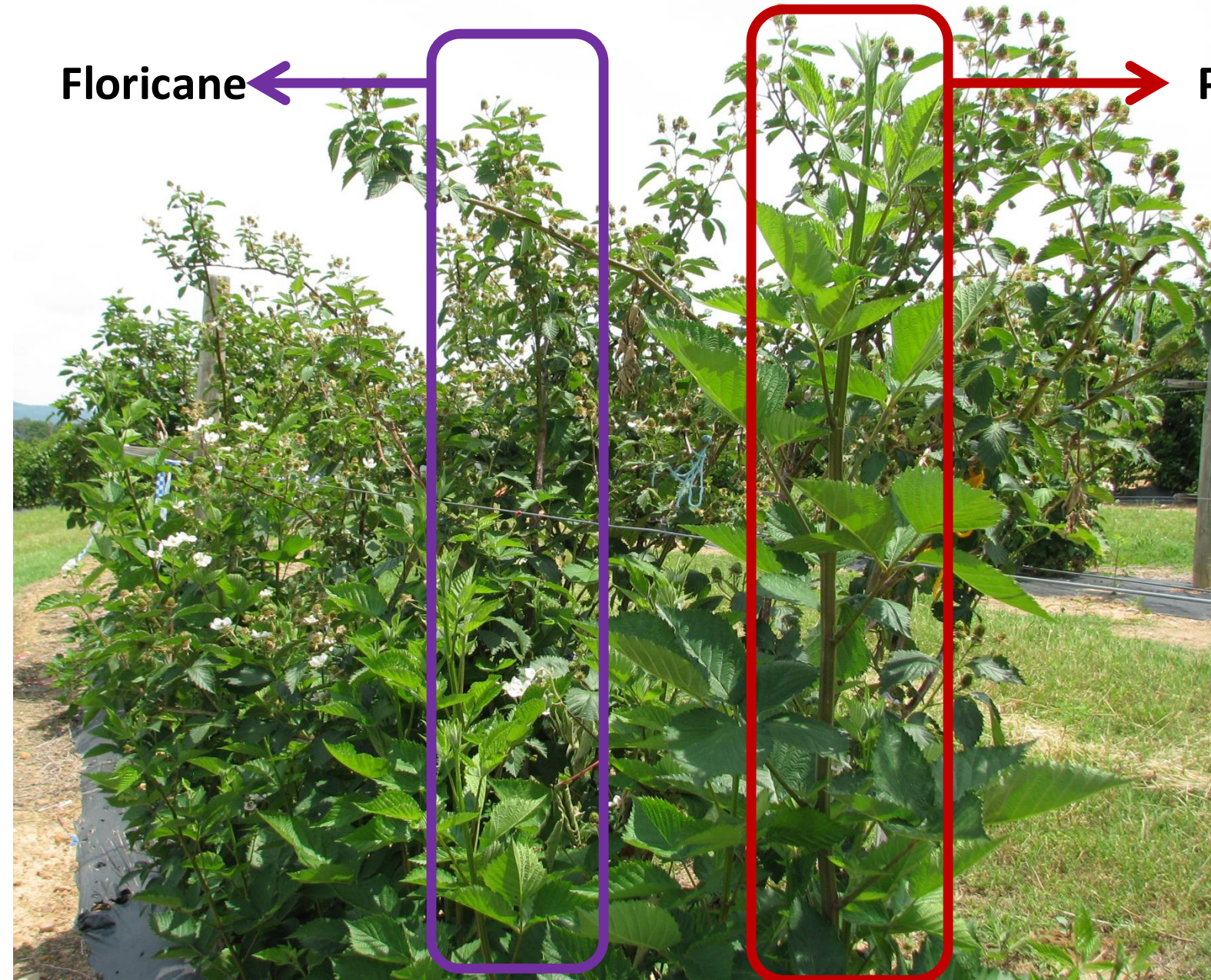
Saffron, *Crocus sativus*



Primocane Blackberry

Floricanes ←

→ Primocanes



High Tunnel Blackberry Using Primocane Fruiting Varieties



Prime-Ark[®] Freedom and Prim Ark-45



Prim-Ark Traveler



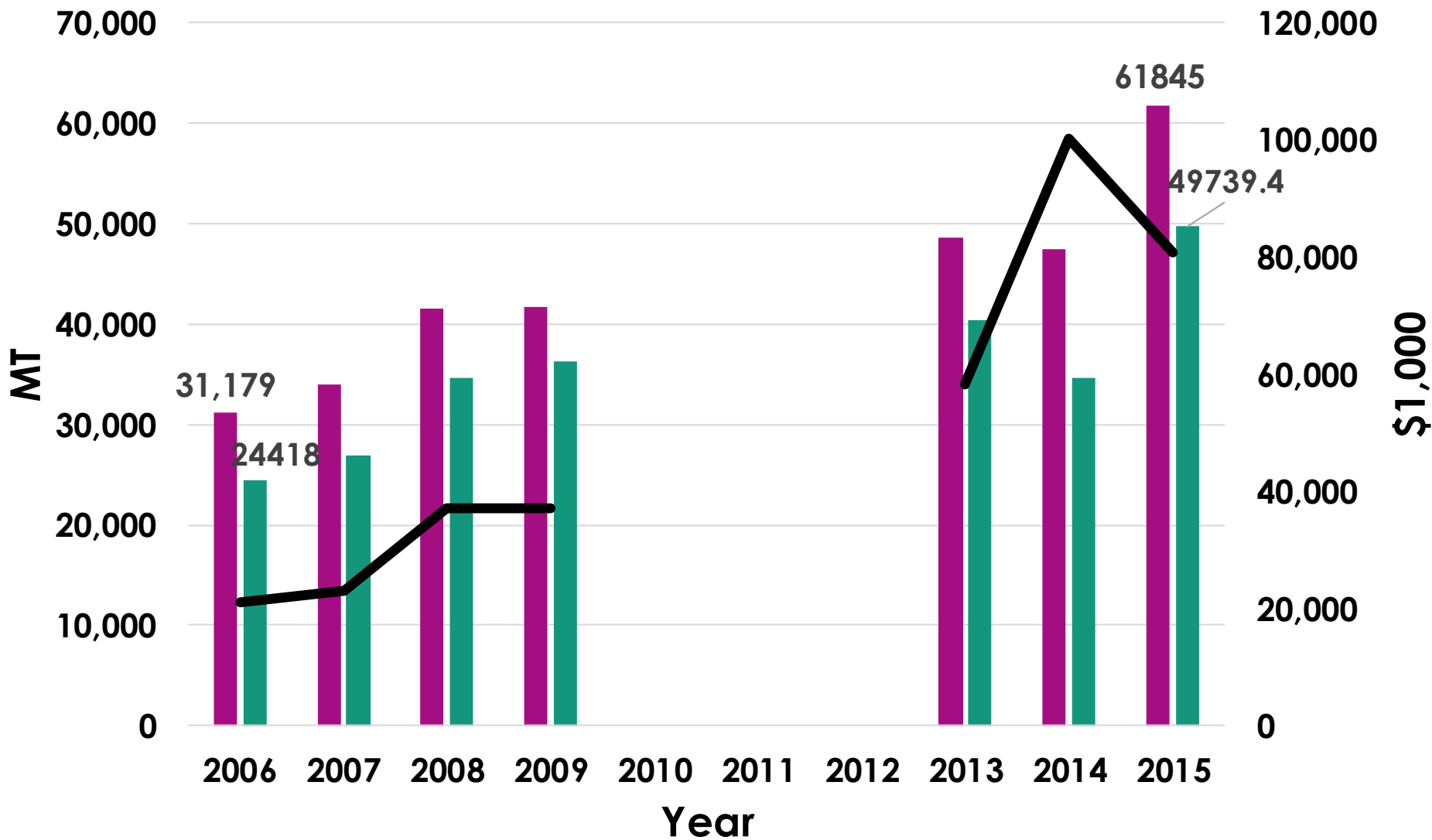


**High Tunnel Production of Fresh
Baby Ginger Root
(*Zingiber officinale*)**

Health Benefits of Ginger

- Stimulate the circulatory system.
- Useful in controlling high blood pressure.
- Reducing fevers.
- Alleviate persistent coughs and all kinds of colds and flu.
- The ability of the ginger to alleviate nausea and vomiting is famous.
- Used by chemotherapy treated patients to prevent vomiting

Volume and value of total and China's imported fresh ginger to the United States, 2006-2015



Chinese Ginger

Concerns:

- In 2014, 16.47% of Chinese ginger sampled had highest level of pesticide residue

Source: California Department of Pesticide Regulation

Ginger plant

The ginger plant has a long history of cultivation, having originated in Asia. Ginger is considered a tropical plant, has dark-green erect stems and lanced-shaped leaves that produces underground rhizomes. The plant may reach 2-4 ft in height.



Growing Ginger

Ginger Seed Rhizomes





In April the potted plants are ready to be transplanted in the high tunnel

In February, plant the seed piece in a one gallon pot $\frac{1}{2}$ - $\frac{3}{4}$ filled with soilless potting mix (2 parts Compost, 2-4 parts Sphagnum Peat Moss, 1 part Perlite, and 1 part Vermiculite), maintain in a warm place (green house)





April-May

October







May



August

September



Mounding (Hilling)

Is the periodic covering of the upward-expanding rhizomes. It is an important process in ginger production.



Baby Ginger



Pickled Ginger Recipe

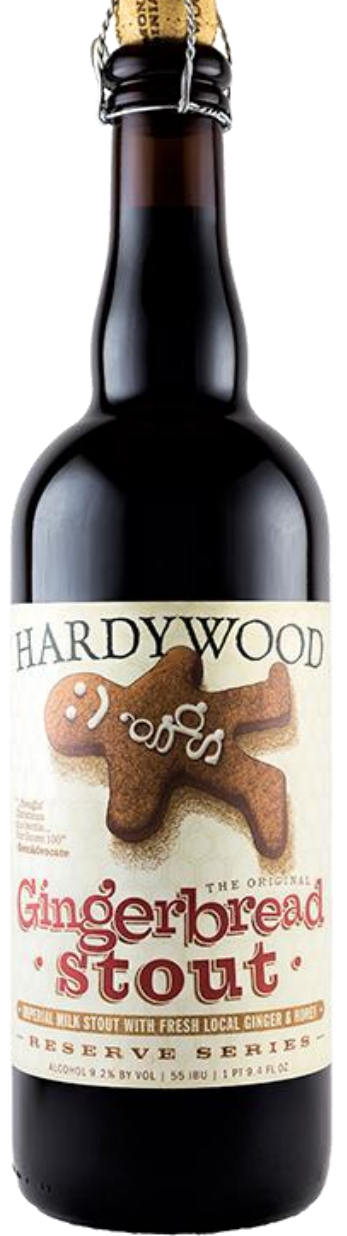
Ingredients:

- 2 lb fresh young ginger (shin shoga)
- 3 cups rice vinegar
- 2 cups sugar
- 2 tsps salt

Preparation:

Wash young ginger root and rub off skin. Slice the ginger thinly and salt them. Leave salted ginger slices in a bowl for one hour. Dry the ginger slices with paper towels and put them in a sterilized container/jar. Mix rice vinegar and sugar in a pan and bring to a boil. Pour the hot mixture of vinegar and sugar over the ginger slices. Cool them. Pickled ginger changes its color to light pink. (*If you are using old ginger, it might not turn pink naturally.) Cover the jar and store it in the refrigerator.









Lemongrass
Petersburg, Virginia / 21 Miles
BUY FRESH BUY LOCAL
\$5.99/lb.
LOCAL LOCAL LOCAL LOCAL

VSU
Baby Ginger
Petersburg, Virginia / 21 Miles
BUY FRESH BUY LOCAL
\$11.99/lb.
LOCAL LOCAL LOCAL LOCAL



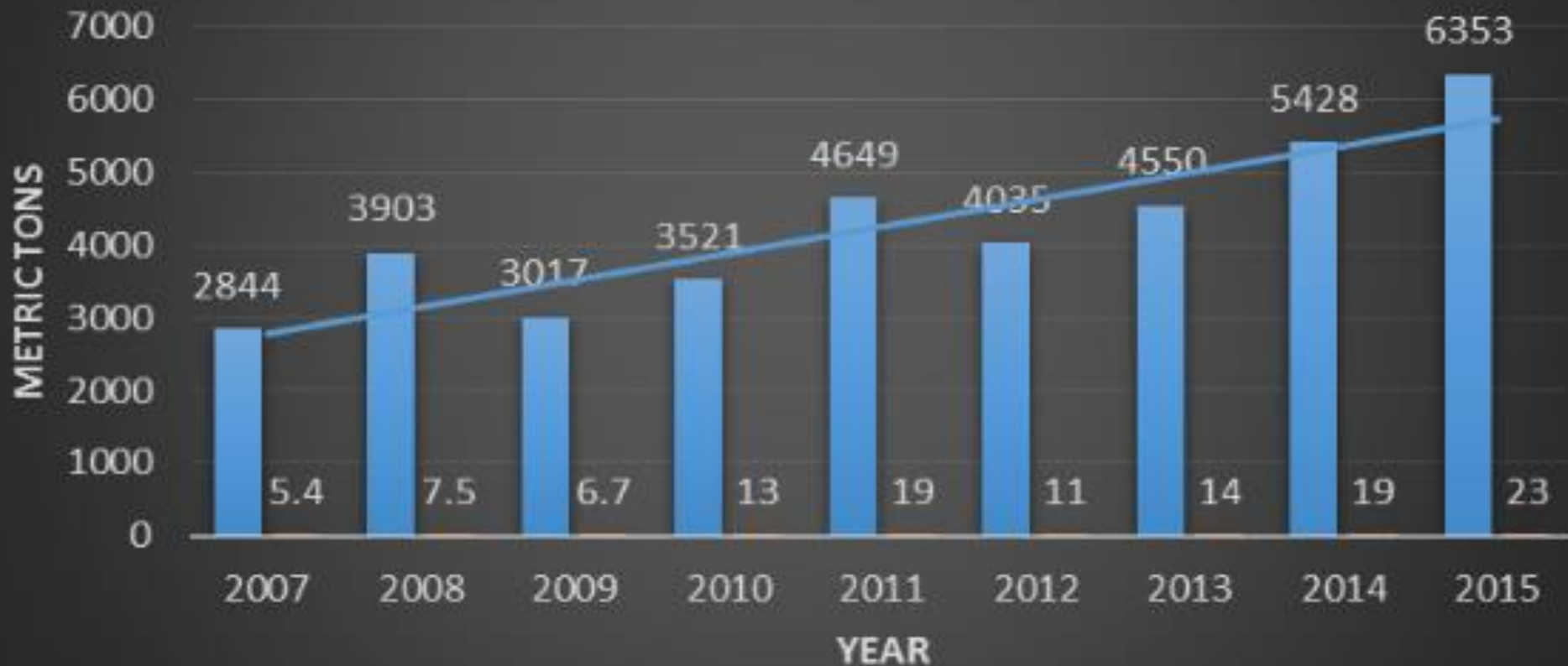
Turmeric



Health Benefits of Turmeric

Curcumin the most bioactive component of turmeric has anti-oxidant, anti-inflammatory, cholesterol-lowering, anti-cancer, anti-bacteria, anti-diabetic, and anti-alzheimer properties.

Figure 1a: United States Turmeric Annual Imports



223% increased from 2007 to 2015





VSU Experimental crops LOCAL BUTTER
Turmeric Root
Peterburg, Virginia / 21 Mix
\$19.99/lb.
LOCAL LOCAL LOCAL

Peterburg
\$5.99/lb.
LOCAL LOCAL

What are These Tubers?



Taro Roots, *Colocasia esculanta*

Taro is a common name for the corms and tubers of several plants in the family Araceae.

Taro is native to southeast Asia. It is a perennial, tropical plant primarily grown as a root vegetable for its edible starchy corm, and as a leaf vegetable and is considered a staple in African, Oceanic and Asian cultures.

Currently a considerable volume of taro is imported to the U.S. and consumed mostly by Asian American.



Taro Plant



Chinese Taro Roots





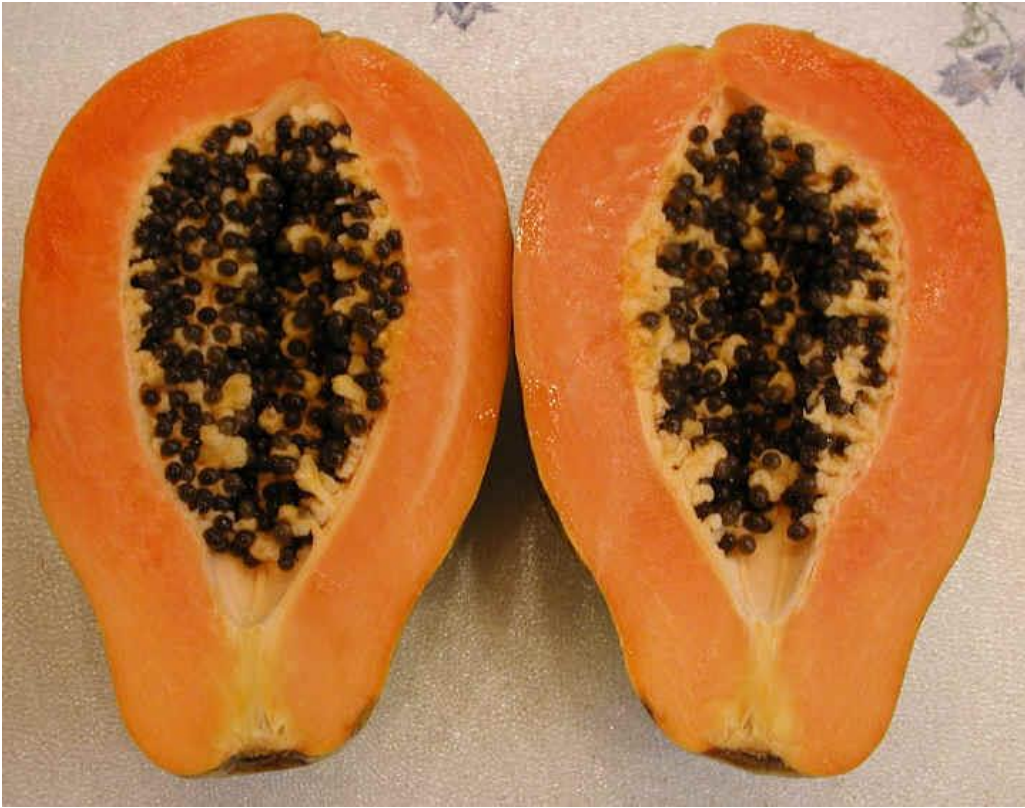


High Tunnel Production of Green Papaya

Papaya

Papaya-*Carica papaya* L.

- The papaya is believed to be native to southern Mexico and part of Central America. It is now cultivated in most tropical and subtropical country.
- The nutritional highlight of papaya is a proteolytic enzyme called papain which is an excellent aid to digestion.
- Papaya is an excellent source of vitamin C. It is a very good source of folate and potassium. In addition, it is a good source of dietary fiber, vitamin E, vitamin A and vitamin K.



Papaya Production



Papaya seedlings -January



Plantlet - March



Ready for transplant in April



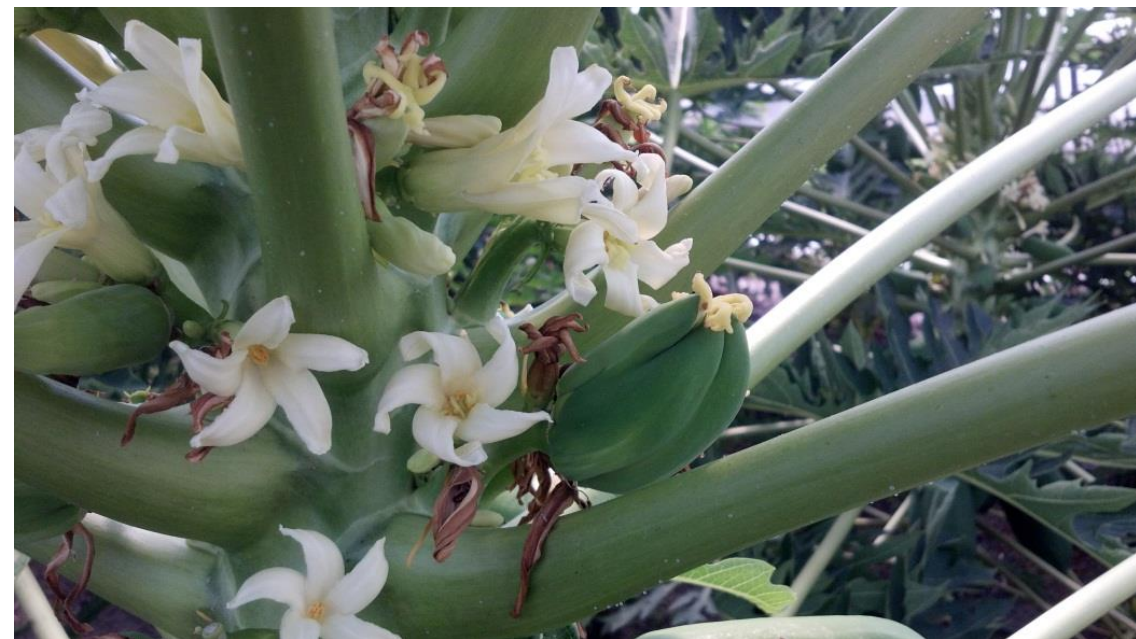
Papaya Production



October

June





Papaya Production





December 2013





Promoting Green Papaya Salad with Local Chefs



Green Papaya Salad

INGREDIENTS

- 1 small green papaya, OR ½ large (select one that is very firm with a shiny green peel, flesh white to light orange in color)
- 2 cups bean sprouts
- 1 cup shredded carrots
- 1 cup snow peas cut into thin strips
- 2 – 3 tomatoes cut into long thin strips
- 4 spring onions (scallions) cut into thin match-like pieces
- ½ cup fresh basil, roughly chopped – extra for garnishing
- ½ cup fresh cilantro, roughly chopped – extra for garnishing
- 1 jalapeno pepper, minced (seeds removed if you prefer a milder salad)
- ½ cup plain or honey-roasted peanuts, roughly chopped

DRESSING:

- 3 Tbsp. soy sauce
- 4 Tbsp. of oil, such as olive
- 3 Tbsp. of lime juice, freshly squeezed
- 3 Tbsp. honey
- 1 – 2 cloves garlic, crushed
- 1 Tbsp. fresh ginger, grated
- Lime wedges for garnish

Yard-Long-Bean

Asparagus Bean

Chinese Long Bean

(Vigna unguiculata (L.) Walp. subsp. sesquipedalis (L.) Verdc.)

Yard-long bean is a popular vegetable among Asian and Indian population living in the U.S.

These beans are rich in protein, calcium, iron, riboflavin, phosphorus, potassium, and vitamin A, and are a very good source of vitamin C, folate, and magnesium.

Long bean

Long bean is an annual climbing plant. Therefore, it requires trellises for proper quality production.

It takes two months from planting to start harvesting. The harvest can continue for up to six months.

The production of long bean, in particular, the harvest is labor intensive, and therefore, it is a suitable crop for small farmers.

The demand for long bean in the U.S. is high due to large number of Asian and Indian population living in the U.S.











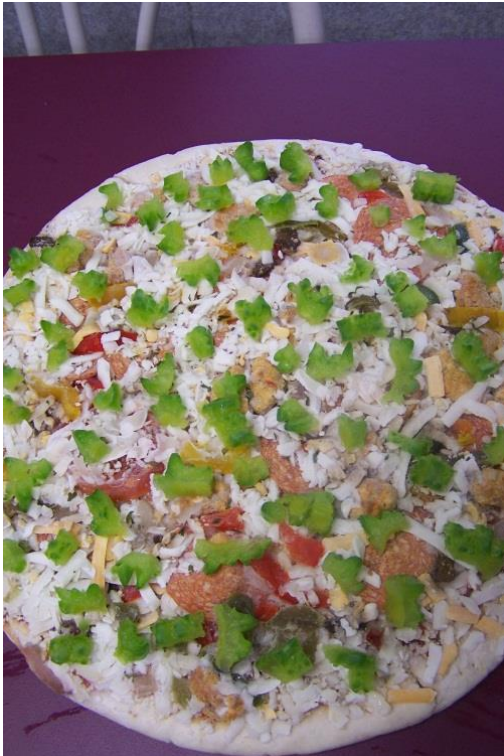
Bitter Melon,



The Health Benefits of Bitter Melon



Bitter Melon Pizza







VSU Experimental Crops LOCAL

Bitter Melon

Petersburg, Virginia / 21 Miles

BUY FRESH BUY LOCAL \$6.99/lb.

LOCAL LOCAL LOCAL LOCAL

Take a culinary adventure with Bitter Melon

Admission of people around the world from the bitter taste of Bitter Melon. Think of melons, which are delicious and low in calories. Bitter melon has a unique skin and a few bitter melon seeds. Chinese and Indian cuisines have used bitter melon for centuries. The fruit is used in many ways, including as a vegetable, fruit, and in soups. It is also used in traditional Chinese medicine to help with digestion and to reduce blood sugar levels.

Pick it: "Choose" Look for a firm, green melon with a few bitter melon seeds. The skin should be bumpy and have a few bitter melon seeds. The fruit is used in many ways, including as a vegetable, fruit, and in soups. It is also used in traditional Chinese medicine to help with digestion and to reduce blood sugar levels.



Lemongrass







